



Relationship between Sense of Coherence, Teacher Self-Efficacy, Job Satisfaction and Burnout among Online Educators amidst the Covid-19 Pandemic in India

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Abstract: The raging pandemic of Covid-19 has not only caused destruction to the world, but also caused a true digital revolution and led to the birth of a new educational era. The new normal has made us adapt to the system of online education. The present study aims to identify the prevalence of burnout and its relationship with sense of coherence, teacher self-efficacy and job satisfaction in the online educators from various schools and universities across India. For the purpose of data collection, the tools used are: Oldenburg Burnout Inventory (OLBI) developed by Demerouti, Bakker, Vardakou and Kantas (2003), Sense of Coherence Scale (SOC-13) by Antonovsky (1987), Teacher Self-Efficacy Scale by Schwarzer, Schmitz and Daytner (1999) and Generic Job Satisfaction Scale by Macdonald and Mac-Intyre (1997). The study also collected qualitative data to gauge the difficulties faced by online educators and what are the methods of coping they have inculcated. To verify the hypotheses of the study, descriptive statistics and simple correlation were computed to investigate the relationship between the variables. The results indicated a significant inverse relationship of burnout with self-efficacy and job satisfaction, and a positive relationship with sense of coherence.

Keywords: Burnout, Job satisfaction, Online teaching, Sense of coherence, Teachers' self-efficacy.

1. INTRODUCTION:

The raging pandemic of Covid-19 has not only caused destruction to the world, but also caused a true digital revolution and led to the birth of a new educational era. Education being a pivotal aspect of an individual's life, this lockdown on schools and colleges were tackled with online teaching. It has only now become of paramount importance to study the consequences of such online education in educators. The present research studies burnout, sense of coherence, teacher self-efficacy and job satisfaction amongst educators in India as many countries in the West have inculcated online education in their teaching dynamics, but since this very concept of teaching over the electronic media was meekly used in India. Burnout was originally defined as a syndrome of exhaustion, depersonalization, and reduced professional efficacy that is encountered among employees who work with other people, such as in social work, health care, and teaching (1). The concept of burnout can be understood by The Multi-dimensional theory of burnout, which is composed of three core concepts, namely, emotional exhaustion, depersonalization and reduced personal achievement. This theory explains burnout as an individual experience of stress, but does not count this experience as being separate from the individual's complex social relationships, but intertwined with it.

- Emotional Exhaustion: refers to being in an emotional strain, spending much more emotions than one has the resources for. The primary sources of the emotional strain come from excessive workload and personal tiffs at the workplace.
- Depersonalization: refers to a misanthropic, significantly disjoined response to other people. Depersonalization usually develops in concordance to an overwhelm of emotional exhaustion.
- Reduced Personal Accomplishment: refers to a curtailment of feelings of capability and being effective at work. There is a lowered sense of belief that one is capable of completing a task at hand. (1).



According to Antonovsky 1987, Sense of Coherence (SOC) is a mixture of optimism combined with a sense of control. The SOC has three main components: Comprehensibility, Manageability, Meaningfulness. In according to this concept, Antonovsky gave the model of SOC, which elaborates on the three core concepts:

- Comprehensibility: pervasive, enduring, though dynamic feeling of confidence that stimuli deriving from one's internal and external environments in the course of living are structured, predictable, and explicable
- Manageability: the resources are available to one to offset the demands posed by these stimuli
- Meaningfulness: these demands are challenges worthy of investment and engagement (2).

Self-efficacy, first coined by Bandura, 1986, is defined as "people's belief about their capabilities to produce designated levels of performance that exercise influence over events that affect their lives" (3). It determines how people feel, think, perceive, motivate themselves and behave. These beliefs impact four major processes: Motivational processes, Cognitive processes, Affective processes and Selection processes. The concept was further elaborated by the model proposed by Bandura, 1994), Social Cognitive theory (SCT), posits that learning occurs in social context which involves interplay between a person, their environment and behavior. The individuals acquire, maintain and perform the behavior in the social environment. The SCT also takes into account past experiences, which may influence reinforcements, expectancies and expectations, that would further determine the behavioral action – if the person would engage in a specific behavior and why would they engage in that behavior. The theory aims to explain how people regulate their behavior through reinforcement and control, in order to achieve a goal-directed behavior that can be maintained overtime. The five constructs of SCT include: Reciprocal determinism, Observational learning, Reinforcements, Expectations and Self-efficacy (4).

Vroom (1964) defined job satisfaction as affective orientations of the person's job profile in which they are presently occupied (5). Herzberg's motivator-hygiene theory builds upon the above definition and suggests that job satisfaction and job dissatisfaction are not on the polar opposites of a continuum, but instead are two unrelated concepts. The theory indicates the presence of – 'motivational factors', like recognition, achievement, pays, incentives enforced in order to increase the satisfaction with work of the person; and 'hygiene factors', such as quality of management, interaction with colleagues, job security, working conditions are associated which are associated with job dissatisfaction. These factors are independent of each other; hence it is possible that the person is neither satisfied nor dissatisfied (6).

2. LITERATURE REVIEW:

One exploratory study looked into the brunt of learning the art of teaching online on teachers teaching a language course, from the face to face traditional teaching method. The study was carried out in the form of small scale discussions; data was gathered from a number of surveys, participant observations by the researcher. The evaluation of the entire pool of data gave some important revelations, technological challenges and the complete change of the method of teaching were the problems overall highlighted, also, the teacher's positive or negative evaluation about the course were also a factor that either added to the difficulty of online teaching or buffered the effects of the same (7). Another research study explored the perceptions of faculty members on the effectiveness of online teaching and the paper also looked at the indicators of the quality of learning over the electronic media, in a nursing program. The sample consisted of a focus group of 11 nursing educators with an average of 15 years of university teaching experience and an average of 6 years of online teaching experience. A semi- structured interview format and guided discussions were used in order to gauge out the opinions of the educators regarding online teaching. The results indicated that the educators suggested in order to ensure a quality of education and results there has to be a sense of connectedness between students and the educator through the online portal, there must be a sharing of experiences, strategies must be designed to make it approachable and establish a mutual comfort (8).

A research study was conducted, focusing on the variables of sense of coherence and burnout in teaching situations. The rationale of this research paper was to elucidate if a sense of coherence can be established as a predictor of burnout. The sample consisted of 144 Israeli interns. The study was carried out in two phases, in the first phase the participants were administered with a sense of coherence in teaching situations and a burnout questionnaire. The second phase was a qualitative phase where the participants had to go through a semi structured interview. The results indicated that, both questionnaire and interview, indicated that a sense of coherence served as a protective factor against burnout, the meaningfulness factor of sense of coherence was found to be the most important one as compared to manageability or comprehensibility. This research points out to the importance of a sense of coherence being an important factor



associated with reducing burnout (9). Another study looked at the variables of morningness, sense of coherence and burnout. The rationale of the study was to establish if morningness was a mediating factor between sense of coherence and burnout. The study was two parts in nature, in the study one, 73 primary school teachers filled the comprehensive morningness scale and sense of coherence scale. In the study 2, 177 teachers filled the Composite morningness scale and the Maslach burnout inventory. The results indicated that Morning oriented teachers had a lower emotional exhaustion, and a higher sense of coherence with respect to comprehensibility, manageability and meaningfulness (10).

Cezmi-Savas, Bozgeyik and Eser (2014) investigated the relationship between teachers' self-efficacy and burnout among teachers working in primary and secondary state schools in Turkey. 163 randomly chosen teachers responded to Maslach Burnout Inventory and Teacher Sense of Efficacy Scale. The data obtained was subject to correlation and hierarchical multiple regression. The results of the study indicated medium yet significant negative correlation between teachers' self-efficacy and burnout levels. Hierarchical regression put forward that teachers' self-efficacy levels predicted their burnout levels negatively. The researchers have also pointed out that the negative relationship between the variables is an intercultural phenomenon (11). One study investigated the relationship between burnout syndrome, self-efficacy, coping-strategies, social support and job satisfaction. The study also aimed to study the comparison between teachers with high and low levels of burnout syndrome. The study included 2,394 teachers from Czech Elementary School. The results indicated a significant relationship between all the variables under study. Teachers with lower burnout scores reported higher self-efficacy, usage of positive coping strategies and better social support. Further analysis indicated that only self-efficacy among teachers had a significant predictability without any job satisfaction and negative coping for teachers with burnout syndrome (12).

3. METHOD AND MATERIALS:

Research Question:

- Is there a significant relationship between Burnout and Sense of Coherence?
- Is there a significant relationship between Burnout and Teachers' Self-Efficacy?
- Is there a significant relationship between Burnout and Job Satisfaction?

Hypotheses:

- There will be a significant relationship between Burnout and Sense of Coherence.
- There will be a significant relationship between Burnout and Teachers' Self-Efficacy.
- There will be a significant relationship between Burnout and Job Satisfaction.

Variables under study:

- Burnout
- Sense of Coherence
- Teachers' Self-Efficacy
- Job Satisfaction

Operational Definition:

Burnout: as measured by the scores on Oldenburg Burnout Inventory (OLBI) developed by Demerouti, Bakker, Vardakou and Kantas, 2003.

Sense of Coherence: as measured by the scores on the short form of Sense of Coherence scale (SOC-13) by Antonovsky, 1987.

Teacher Self-Efficacy: as measured by the Teacher Self-Efficacy scale by Schwarzer, Schmitz and Daytner, 1999.

Job Satisfaction: as measured by the Generic Job Satisfaction scale by Macdonald and MacIntyre, 1997.

Research Design:

A correlational study was employed using a survey method. A correlational study was used to find if there exists a relationship between two variables. It will study whether an increase or decrease in one variable corresponds to an increase or decrease in the other variable.

Sample and Sample Design:

Sample: The sample consisted of 53 online educators from all the academic sections across India.



Sampling Technique: A Snowball sampling technique was employed as the collection of data was from a focused sample of online educators across India. Google forms were generated and circulated to the individuals via whatsapp and email.

Data Collection:

Quantitative data collection

Burnout: The Oldenburg Burnout Inventory (OLBI) developed by Demerouti, Bakker, Vardakou and Kantas (2003) is a 16 item inventory measuring two core aspects of burnout, namely Emotional exhaustion and Disengagement. The items lie on a 4 point Likert scale and higher measures on this scale indicate a higher burnout rate. Psychometric properties of the scale have been established at several occasions mainly, it displays a sound test-retest reliability and internal consistency, as well as factorial, convergent, and discriminant validity.

Sense of Coherence: The short form of the Sense of Coherence scale (SOC-13), developed by Antonovsky (1987), is a 13 item measure, measuring three aspects of sense of coherence, that is, meaningfulness, comprehensibility and manageability. The items lie on a 1-7 point semantic scale. The scores lie between 13 to 91. Psychometric properties of the SOC-13 have been established at several occasions and with respect to a number of cultures. According to a rich source of research studies, the face validity, construct validity, criterion validity and predictive validity in all point towards a psychometric soundness of the scale. SOC-29 test-retest correlations range from 0.69 to 0.78 (1 year), 0.64 (3 years), 0.42 to 0.45 (4 years), 0.59 to 0.67 (5 years), and finally 0.54 after the 10-year follow-up (13).

Teacher Self-Efficacy: The Teacher Self-Efficacy Scale was devised by Schwarzer, Schmitz and Daytner (1999). It is a 10 item scale that measures four broad areas, that is; job accomplishment, skill development, coping with job stress and social interaction with students, parents, teachers and colleagues. It is based on Bandura's social cognitive theory. The final score is obtained by summing up the scores of all the items, that would range between 1 to 10. The scale has sound psychometric properties where Cronbach alpha was found to be between 0.76 to 0.82, test-retest reliability obtained was 0.76 for a period of one year and 0.65 for a period of two years. The scale yielded higher associations with General Self-Efficacy Scale (GSES). The discriminant validity was established.

Job Satisfaction: The Generic Job Satisfaction Scale was developed by Macdonald and MacIntyre (1997). The scale includes 10 items that measure four domains – characteristics of the job, workplace affect, general affective reactions and personal problems. The scores are obtained by summing up the scores of all the items, which would range between 10 to 50. The scale has sound psychometric properties with a reliability coefficient of 0.77. The scale has also been significantly correlated with factors like job stress, isolation, injury or illness and boredom.

Qualitative data collection:

The qualitative data was collected by asking the participants to respond to two short answer questions-

1. Mention in brief about the problems faced by you while conducting online classes.
2. What steps have you been taking in order to deal with those problems?

Procedure:

The data was collected by the use of Google forms, where the target sample of online educators received the link of the forms and voluntarily participated. The forms were sent to multiple online educators from various universities. For the purpose of this study, snowball sampling was employed. The Google form contained an elaborate section explaining the purpose of the experiment. Prior consent was taken from each participant and they were assured through the form itself that the data received was kept confidential and will only be used for academic purposes. The demographics of the participants were received. After administering the self report Google forms, the raw data obtained was scored according to the scoring criteria mentioned for each scale. The coded data was then analysed by the use of Statistical Package for Social Sciences, descriptive and inferential statistics was obtained.

Inclusion Criteria:

- Online educators, teaching in schools and universities.
- Online educators who have been teaching online for over two months.

**Exclusion Criteria:**

- Participants whose immediate family members or themselves were diagnosed with Covid-19 in the past three months.
- Participants who have a pre-existing physical health or mental health condition.

Methods Used for Data Analyses

To verify the hypotheses of the study statistical analysis used Descriptive Statistics and Pearson's Product Movement Correlation was used.

4. RESULT:**Table 1.1: Descriptive Statistics**

	Mean	Std. Deviation	N
Teachers' Self-Efficacy	34.94	4.069	53
Burnout	34.26	6.224	53
Job Satisfaction	37.47	6.024	53
Sense of Coherence	52.02	8.541	53
Experience in Teaching	11.75	8.10	53

Table 1.1 depicts the descriptive statistics, that is, the mean and standard deviation of the three variables and the population.

Table 1.2: Correlation of Burnout with Teachers' Self-Efficacy, Job Satisfaction and Sense of Coherence.

		Burnout	Self-Efficacy	Job Satisfaction	Sense of Coherence
Burnout	Pearson Correlation	1	-.543**	-.388**	.360**
	Sig. (2-tailed)		.000	.004	.008
	N	53	53	53	53

**. Correlation is significant at the 0.01 level (2-tailed).

The data found in Table 1.2 indicate that there is a significant inverse correlation between burnout and self-efficacy, there is a significant inverse correlation between burnout and job satisfaction and there is significant positive correlation between burnout and sense of coherence.

5. DISCUSSION:

This study sets out to understand the relationship between sense of coherence, teachers' self-efficacy, job satisfaction and burnout among online educators during Covid-19 pandemic across India. This study is first of its kind that extends to understand the relationship between the variables under study during the pandemic. To verify the hypotheses of the study, Descriptive statistics and Pearson Product Movement Correlation were computed and analysed. Table 1.1 indicates the descriptive statistics of the variables under study, that is, burnout, sense of coherence, self-efficacy and job satisfaction. The sample size of the current study was 53 participants (N=53).



Table 1.2 indicates correlation of Burnout with Teachers' Self-Efficacy, Job Satisfaction and Sense of Coherence. The correlation between burnout and sense of coherence obtained was .360, hence significant at 0.01. Thus, the results obtained are in line with the hypothesis one, that is, there will be a significant relationship between burnout and sense of coherence. This finding provides a new insight into burnout risk and coping mechanisms used by the educators. This result could be suggestive of; high sense of coherence can lead to heightened awareness and high levels of motivations, which can further lead to increased conscientiousness to work, which in turn would lead to higher levels of burnout. The educators could also be engaging into motivating themselves to perform better at their job, which is also congruent with qualitative results, that, the educators engage into motivating themselves by perceiving it as a new skill or a challenge. The correlation between burnout and teachers' self-efficacy obtained was -.543, hence significant at 0.01 level. Thus, the results obtained are in line with the hypothesis two, that is, there will be a significant relationship between burnout and self-efficacy. Similar results were also obtained in a study that examined the relationship between self-efficacy and burnout syndrome among 2,394 teachers at Czech grammar schools. The results indicated a significant inverse relationship between self-efficacy and burnout syndrome (14).

The correlation between burnout and job satisfaction obtained was -.388, hence significant at 0.01 level. Thus, the results obtained are in line with the hypothesis three, that is, there will be a significant relationship between burnout and job satisfaction. Similar results were also obtained in a study conducted in Uttar Pradesh, India. The study examined the relationship between burnout and job satisfaction polytechnics teachers. The results of the study indicated a negative relationship between job satisfaction and burnout. Hence, the teachers who did not face difficulty in adjusting to the working environment and felt satisfied, would be prone to low levels of burnout (15). The qualitative analysis was conducted to understand the difficulties faced by online educators and the methods of coping inculcated to face these difficulties. The analyses have put forward various themes. The problems faced by the educators through online mode amidst the pandemic are connectivity issues, low levels of interaction rates, low levels of motivation among students to answer in class, parents attending/watching the classes and sometimes prompting answers to the students. The online educators have inculcated various coping strategies to counter the difficulties faced by them, like, using novel online teaching aids and making the class livelier with innovative activities. Another theme surrounding coping strategies also indicated that, educators also worked on their motivation levels by perceiving it as a new skill that they are learning or a challenge.

6. RECOMMENDATIONS:

For the purpose of this study, gender, personality, and socio-economic status were not controlled, and it would be interesting to conduct further research on the impact of these variables on the trends observed. This study could be further replicated on a larger sample population, which will aid to build interventions.

7. CONCLUSION:

In conclusion, the results of the quantitative analyses indicate an inverse relationship of burnout with teachers' self-efficacy and job satisfaction, and a positive relationship with sense of coherence. A few of the themes emerged from qualitative analysis were, some of the problems faced by educators were connectivity issues, low levels of interaction, low levels of students' motivation, and parents watching/attending the classes and prompting answers. Some of the coping strategies used by online educators included using novel online teaching aids, making the class livelier by innovative activities and keeping themselves motivated by perceiving it as a new skill that they are learning.

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